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REMARKS

Claims 1-40 are pending in this application.

The Office action rejects claims 1-40 under 35 U.S.C. 103(a) over Kurowski (USP 6,553,127) and Leighton (USP 5,949,885). The applicants respectfully traverse this rejection.

In independent claim 1, upon which claims 2-8 depend, the applicants claim a method for discouraging a theft of content material that includes creating an entirety parameter that is based upon a plurality of security identifiers associated with a plurality of data items in the content material, and including the entirety parameter in the data set comprising the content material.

In independent claim 9, upon which claims 10-16 depend, the applicants claim a method of decoding content material that includes reading a plurality of security identifiers corresponding to data items in the content material, upon which an entirety parameter is based, and rendering the content material based on a correspondence between a determined entirety value and the entirety parameter.

In independent claim 17, upon which claims 18-24 depend, the applicants claim a storage medium that comprises a data structure that includes an entirety parameter that is dependent upon a plurality of security identifiers associated with data items.

In independent claim 25, upon which claims 26-32 depend, the applicants claim an encoder of content material that includes a binder that is configured to create an entirety parameter based on a plurality of the security identifiers associated with data items of the content material, and a recorder that is configured to combine the entirety parameter with the plurality of data items to form a self-referential data set that is stored on a recorded medium.

In independent claim 33, upon which claims 34-40 depend, the applicants claim a decoder of content material that includes an entirety checker that determines an entirety value based on a plurality of security identifiers associated with data items of the content material, and controls the rendering of the content material based on a correspondence between the entirety value and a received entirety parameter.

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Each of the applicants' independent claims includes a security parameter that is based on a plurality of security identifiers associated with data items of protected content material. The applicants' FIG. 2 illustrates a preferred embodiment, wherein each data item 220 has an associated watermark 230, and a security parameter 240 comprises a hash of these watermarks 230. If any of the watermarks 230 are missing when the content material is received, a hash of the received watermarks will not match the security parameter 240, thereby indicating that the received data set is incomplete.

Neither Kurowski nor Leighton teach or suggest a security parameter that is based on a plurality of security identifiers associated with data items.

The Office action acknowledges that Kurowski does not teach a security parameter that is based on a plurality of security identifiers associated with data items of protected content material, and relies upon Leighton for this teaching. (Office action, page 3, line 11.) The Office action cites Leighton page 5, line 65 through page 6, line 16 for this teaching. The applicants respectfully disagree with this characterization of Leighton.

At the cited text, Leighton teaches:

"The original offset watermark vectors are computed using a secret random hash function H. The function H maps copyright and other information that the user desires to embed in the document (e.g., "This picture is the property of XYZ Corp., unauthorized copying is forbidden") to the sequence of numbers W=w₁₃ 1, . . . , w₁₃ n that was used as the original offset watermark vector. The sequence of numbers preferably has same structure and function as discussed above and appear to be random, but the sequence is easily reconstructed given the secret function H and the underlying information to be inserted into the document. Hence, a watermark is identified by reconstructing the original offset watermark vector locally instead of retrieving the vector from a database. More generally, the text to be embedded may be a simple serial number, and this serial number can be retrieved from the document by checking all possibilities to see if there is a correlation. This check can be done locally if H is available, since all relevant original offset vectors can be regenerated as needed."

As presented above, Leighton teaches a hash that maps an identifier of the content material to a sequence of apparently random numbers based on information that is added to the content material. (This added information serves to identify each copy of the content material.) Of particular note, neither the identifier of the content material nor the

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sequence of random numbers can be said to be security identifiers that are associated with data item comprising the content material.

Leighton's identifier of the content material, "(e.g., "This picture is the property of XYZ Corp., unauthorized copying is forbidden")" in the cited text, does not serve as a security identifier of any of the data items within the content material, as the term security identifier is used in the art, and as used in the applicants' specification (e.g. in claim 1, the applicants claim a "security identifier that is configured such that a modification of the data item effects a modification of the security identifier"). In like manner, the added apparently random numbers are not based on the data items comprising the content material, and thus cannot be said to correspond to security identifiers of these data items.

Because neither Kurowski nor Leighton, individually or collectively, teach or suggest a security parameter that is based on security identifiers associated with data items in protected content material, as specifically claimed in each of the applicants' independent claims, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1-40 under 35 U.S.C. 103(a) over Kurowski (USP 6,553,127) and Leighton.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the present application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted.

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